

IN THE SPECIFICATION:

Entry of the following amendments to the specification is respectfully requested:

[0004] The use of infrared cameras in such sensor arrangements is also known (compare see, e.g., technical journal: CAR AND DRIVER, October 1998).

Infrared cameras obtain a heat image of the driving environment. In the heat image, all contours and objects are based on thermal contrasts. However, the information which is important for the driving task or for the reaction of a driver assistance system cannot always be obtained from the heat image.

[0007] This object is achieved by a sensor arrangement for a motor vehicle for detecting the environment using at least two camera systems. Each camera system operates in a different spectral region. Each camera system is adjusted to obtain images in a different focal distance ranges.

[0009] In this case, the different camera systems are adjusted to ~~equipped with~~ different ~~focal distances~~ distance ranges. For example, an infrared camera takes over the environmental detection in the remote range because it is suitable for day and night use and is free from the effects of blinding. Freedom from blinding means, in this context, that the individual pixels are not overmodulated by the headlights of oncoming vehicles. The image information is therefore retained although the environment is completely dark. The close range is detected by the

CCD camera. In particular, the CCD camera is adjusted such that it operates in a range which is illuminated by the front headlights when the vehicle headlights are switched on. Because of the higher illumination level, this measure reduces the susceptibility of the CCD camera to blinding effects.

[0011] When using camera systems adjusted to ~~with~~ different focal distances distance ranges and with connected imaging scales, the driving environment, as a whole, can be detected better in both the close and remote ranges.

[0012] Another advantage of using two camera systems with different spectral operating regions consists of determining the atmospheric absorbance in the two spectral regions via differential contrast evaluation, a comparison of differences in contrast between objects and their environments. Because atmospheric absorbances have different effects on images formed by different camera systems adjusted to different distance ranges, by ~~By~~ comparing differences in contrast observed by the different camera systems (which are indicative of the atmospheric absorbances), conclusions can be drawn with respect to the extent of fog or haze, ~~which has a different effect on the sensor range~~. Furthermore, in conjunction with a visual range model stored in a vehicle, a driver's visual range can be determined from the detected absorbances. This information, in turn, can be made available to the driver, or control parameters can be adjusted in the vehicle as a function of the determined driver's visual range.